

AG
CM
wherein the one or more arrays of orifices formed in said innermost tube establish a substantially uniform backing pressure along substantially the length of the innermost tube, thereby promoting substantially uniform delivery of the gas out of the orifices in the outermost tube and along substantially the length of the outermost tube over a range of operating conditions.

13. The gas delivery metering tube of claim 1 wherein the innermost tube has the following properties:

$L/D < 70$

$D/d \approx > 10$

$NA_{\text{port}}/A_{\text{tube}} \approx \leq 1$

A²
CM
where L is the length and D is the diameter of the innermost tube, d is the diameter of one orifice in said array of orifices in said innermost tube, N is the number of orifices in the innermost tube, A_{port} is the cross sectional area of each of said orifices, and A_{tube} is the area of said innermost tube; and

the outermost tube has the following properties:

D_{eff} and D_{in} are within a factor of three of each other

$\text{SurfaceArea}_{\text{outer}}/NA_{\text{outer}} \approx 10 \text{ or more}$

where D_{eff} is the effective diameter of the effective annular space, $\text{SurfaceArea}_{\text{outer}}$ is the surface area of the outermost tube, NA_{outer} is the total cross sectional area of all of the orifices in the outermost tube, and D_{in} is the inner diameter of the innermost tube.

REMARKS

This amendment is submitted in response to the Office Action dated May 31, 2001. A petition for a one month extension of time is enclosed to extend the due date of this response from August 31, 2001 to September 30, 2001. This response is filed in a timely manner, as September 30, 2001 fell on a Sunday.

Figures 1-4 have been corrected as shown in red in the attached figures to designate these figures as Prior Art. Applicant requests the Examiner's approval of this change.